

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### Listing of Claims

Claims 1-6. (canceled)

Claim 7 (currently amended). An electronically controlled electric motor comprising:

a shaft;

at least one rotor having permanent magnets thereon for rotation about the shaft;

a stator housing having coils; and

motor position sensors arranged in the stator housing, wherein at least one position sensor comprises a solvent resistant electrical conductor produced integrally with connecting leads; and

wherein a current is induced in the electrical conductor by a moving magnetic field; and

wherein the rotor and position sensors operate in the presence of one or more solvents and the connecting leads of the positions sensors are led to a space outside the presence of solvents.

Claim 8 (canceled).

Claim 9 (previously presented). The electric motor as claimed in claim 7, wherein the electrical conductor is a coil.

23/01/04  
JF  
Accepted

Claim 10 (previously presented). The electric motor as claimed in claim 7, wherein the electrical conductor is a wire arranged parallel to the shaft.

Claim 11 (previously presented). The electric motor as claimed in claim 7, further comprising position magnets comprising a second set of permanent magnets positioned on a disk, wherein the disk and position sensors are vertically displaced from the rotor and the disk is arranged for rotation about the shaft opposite the position sensors.

Claim 12 (canceled).

Claim 13 (previously presented). The electric motor as claimed in claim 7, wherein the moving magnetic field which induces the current in the electrical conductor is generated by the rotation of the permanent magnets on the rotor.

Claim 14 (previously presented). The electrical motor as claimed in claim 9, wherein the coil is coiled copper wire.

Claim 15 (currently amended). An electric motor for use in an environment containing solvents comprising:

a stationary stator housing;

a shaft through the stator housing;

a rotor positioned inside the stator housing for rotation about the shaft, wherein the rotor contains one or more permanent magnets thereon;

one or more electrical coils fixed in the stator housing; ~~and~~

one or more position sensors fixed in the stator housing, wherein the position sensors comprise solvent resistant electrical conductors integral with connecting leads, and wherein current is induced in the electrical conductors by a moving magnetic field; and

wherein the rotor and position sensors operate in the presence of one or more solvents and the connecting leads of the positions sensors are led to a space outside the presence of solvents.

Claim 16 (previously presented). The electrical motor as claimed in claim 15, wherein the electrical conductors are coils.

Claim 17 (previously presented). The electrical motor as claimed in claim 16, wherein the coils are coiled copper wires.

Claim 18 (previously presented). The electrical motor as claimed in claim 15, wherein the electrical conductors are pulse wires arranged parallel to the shaft.

Claim 19 (previously presented). The electrical motor as claimed in claim 15, further comprising a disk having permanent magnets thereon arranged for rotation about the shaft.

Claim 20 (previously presented). The electrical motor as claimed in claim 19, wherein the moving magnetic field which induces the current in the electrical conductor is generated by the rotation of the permanent magnets on the disk.

Claim 21 (previously presented). The electrical motor as claimed in claim 15, wherein the moving magnetic field which induces the current in the electrical conductor is generated by the rotation of the permanent magnets on the rotor.

Claim 22 (previously presented). The electrical motor as claimed in claim 18, wherein the pulse wires are copper wires.

Claims 23-24 (canceled).